Identification of factors contributing to the utilization of home health agencies in North Dakota
by LaVerne Elizabeth Lee

A thesis submitted in partial fulfillment of the requirements for the degree of MASTER OF NURSING
Montana State University

Abstract:
The purpose of this study was to identify those factors contributing to the limited utilization of the home health agencies in North Dakota.

Data were collected by use of an open-ended questionnaire devised by the researcher and sent to 228 physicians, 52 public health nurses, and 60 hospital nurses, employed in the geographic areas of the nine home health agencies in North Dakota.

A total of 151 questionnaires were returned. This included 39 percent of physicians, 62 percent of public health nurses, and 45 percent of hospital nurses.

The respondents identified those factors limiting the effectiveness of the home health programs to be: 1. limited physician referrals 2. cost to the home health agency as well as to the patient 3. restrictive government regulations 4. lack of knowledge of the program by physicians, hospital nurses and the public In spite of obvious problems, the prevailing feeling is that there is a future for the home health programs in North Dakota.

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Date February 7, 1975

IDENTIFICATION OF FACTORS CONTRIBUTING TO THE UTILIZATION OF HOME HEALTH AGENCIES IN NORTH DAKOTA

by

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A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF NURSING

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ABSTRACT

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A total of 151 questionnaires were returned. This included 39 percent of physicians, 62 percent of public health nurses, and 45 percent of hospital nurses.

The respondents identified those factors limiting the effectiveness of the home health programs to be:

1. limited physician referrals
2. cost to the home health agency as well as to the patient
3. restrictive government regulations
4. lack of knowledge of the program by physicians, hospital nurses and the public

In spite of obvious problems, the prevailing feeling is that there is a future for the home health programs in North Dakota.

Chapter I

INTRODUCTION

Advances in medical science have made it possible for human beings to attain senescence in ways never before thought possible. This longevity has resulted however in myriad health problems. Such health problems are compounded by the fact that the majority of the aged population is economically deprived and, to a large extent, medically indigent. Because of this the elderly often forego needed medical treatment.

It was with these people in mind that the government envisioned health insurance for the aged. Although such insurance was considered as early as 1935, it was not until thirty years later, in 1965, that amendments to the Social Security Act (enacted in Public Law 89-97) established a comprehensive program of health insurance, commonly known as "Medicare," for individuals 65 years and over. This law provided a mechanism for financing an array of health services, including in-hospital care, extended care benefits, and home health services. As a result of this legislation home health agencies were established throughout the country, nine of which are located in North Dakota.

Unfortunately the home health agencies, specifically in North Dakota, are experiencing limited utilization. Of the many problems contributing to this limited utilization the greatest of these appears to be limited understanding (and thus, limited support) of the home

health program by those physicians and nurses who are in a position to implement the program at the local level. Without referrals from physicians and follow-up from the nurses, home health agencies cannot survive.

This study will attempt to identify the reasons why home health agencies in North Dakota are under utilized. It is hoped the results of this study will provide both physicians and nurses with insight relevant to the delivery of health care services to the elderly in their homes.

Major Purpose of the Study

The major purpose of this study is to identify those factors which are contributing to the limited utilization of the home health agencies in North Dakota.

Specific Objectives

1. To determine the acceptance of and willingness to participate in the home health program by:
   a. physicians
   b. hospital nurses
   c. public health nurses
2. To determine the individuals' understanding of their role in the utilization of the home health program by:
   a. physicians
   b. hospital nurses
   c. public health nurses

Need for the Study

Home health programs are designed to serve the patient in his home, by offering an array of services to achieve and sustain an optimum state of health, activity, and independence for the individuals. Some advantages of the home health programs are to:

1. reduce the length of hospitalization by making early discharge possible.
2. diminish the need for readmission to the hospital.
3. prevent many admissions to nursing homes.
4. provide a more economical alternative to institutional care.
5. release hospital and institution beds for the acutely ill patients.
6. provide patient care in the normalcy of the home environment.
7. teach homebound patients to live independently.[1]

Although home health programs would appear to provide the solution to many health needs of the elderly, these programs are under utilized, under-financed, and diminishing as the need increases.

There are currently eight home health agencies in North Dakota, seven of which are still operating. (See Appendix B for a map identifying the locations of the home health agencies in North Dakota.)

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[1]Brajan Trager, Home Health Services in the United States, A Report to the Special Committee on Aging, Government Printing Office, Washington, D.C., 1972, p. 60.

The home health agencies in North Dakota are confronted with limited physician referrals, insufficient public health nursing staff, great distances to travel from the home health agency to the patient's home, and inadequate funding. All these problems appear to be contributing to the limited utilization of the home health agencies. Government funding for the development of viable home health services has been minimal. The regulatory conditions are so narrow that they make the product negligible in terms of meeting real need.[2]

Of the above mentioned problem areas, limited physician referrals has had the greatest impact. Without patient referrals the home health agencies cannot survive. The federal law states that home health services may be furnished to any individual who is under the care of a physician; it requires therefore, that the attending physician establish a written plan of care along with a statement certifying that there is a necessity for the home health services. (See Appendix D for the portions of the Social Security Act relating to home health services.)

There appears to be an appreciable lack of understanding of the home health program by the physicians. It is a widely accepted fact that some physicians need prompting to initiate a referral. Without physician prompting, a referral is not forthcoming and the patient is

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[2]Ibid., p. 5.

denied home health care. There are other physicians who seemingly refer every patient for home health care, appropriately or not, and will not accept the limitations of the services.[3]

A lack of understanding and interest in the home health program by the nursing profession is another area contributing to the limited utilization of the home health programs. Some hospital nurses appear unaware that there is such a program available for their patients upon discharge while other hospital nurses apparently lack the knowledge and understanding of the home health program and the types of patients who are eligible for services. Ideally, plans for home health care should begin when the patient is admitted to the hospital. This is not occuring in a majority of hospitals in North Dakota.

Still other factors contributing to the limited utilization of the home health programs include limited public health nursing staff, the great distances to be traveled from the home health agencies to the patients' homes, and insufficient funding.

Assumptions of the Study

It was assumed by the researcher at the beginning of the study that:

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[3]Marie Brennan, "Home Health Agencies in Rural Communities," (unpublished paper, North Dakota State Department of Health, 1973), p. 3.

1. the home health agencies in North Dakota are experiencing limited utilization, resulting in diminished benefits being offered to the elderly.

2. the success of the home health program is dependent upon the physicians and nurses in a position to implement the program in their area.

3. generally, the elderly are economically deprived and medically indigent.

4. elderly people wish to maintain their independence, preferring to remain in their own homes.

Limitations of the Study

The limitations of this study are those inherent in survey research utilizing a mailed, open-ended questionnaire.

It is agreed by researchers that the subjective type of questionnaire, as used in this study, lends itself to possible misinterpretation.

Definition of Terms

The following definitions were formulated for the purposes of this study to provide clarification of the terminology used.

1. Public Health Nurse - a registered nurse, employed by a community or hospital to offer home health care.

2. Provider of Services - a hospital, extended care facility, or a home health agency.

3. Home Health Agency - a public or private organization, or a subdivision of such an agency or organization, which:

   a. is primarily engaged in providing skilled nursing and other therapeutic services,

b. has policies established by a professional group associated with the agency or organization,

c. maintains clinical records on all patients.[4]

4. Home Health Services - include those items and services furnished to an individual, who is under the care of a physician, and a home health agency, which gives care on a visiting basis in the client's place of residence:

a. part time or intermittent skilled nursing care;

b. physical, occupational, or speech therapy;

c. medical social services;

d. intermittent services of a home health aide;

e. medical supplies.[5]

5. Covered Service - those home health services for which reimbursement will be received from Medicare.

6. Benefit Period - a period of consecutive days during which services furnished to a patient, up to a certain specified maximum amount, can be paid for by the hospital insurance plan.[6]

7. Fiscial Intermediary - Blue Cross of North Dakota handles the Medicare claims for the home health agencies in North Dakota.

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[4]United States Department of Health, Education and Welfare, Social Security Administration, Title 18 Health Insurance for the Aged, Public Law 89-97 of the Social Security Act, Government Printing Office, Washington, D.C., July 3, 1965, p. 38.

[5]Ibid., p. 37.

[6]United States Department of Health, Education and Welfare, Social Security Administration, Social Security Handbook, 4th edition, Government Printing Office, Washington, D.C., 1969, p. 352.

8. Hospital Based Home Health Agency - those agencies financed by a hospital and having their offices in the sponsoring hospital.

9. Community Based Home Health Agency - those home health agencies which are a part of a generalized public health nursing program in a city or county. These agencies are supported by local taxes.

10. Generalized Public Health Nursing Program - this involves all aspects of public health nursing, including school health, health counseling and teaching, various clinics (i.e., immunization), as well as home health services.

11. Homebound - a client who is confined to his home, unable to leave without assistance and then only for out-patient care.

12. Skilled Nursing - those services which must be furnished by or under the direct supervision of a licensed nurse to assure the safety of the patient and to achieve the medically desired results.

Chapter II

REVIEW OF LITERATURE

The 1965 amendments to the Social Security Act enacted in Public Law 89-97 established a comprehensive program of health insurance, commonly known as "Medicare," for individuals sixty-five years of age and over. This law provides a mechanism for financing an array of health services, including in-hospital care, extended care benefits, and home health services. The concept envisioned by Medicare is to allow for continuity of care as the patient moves from one level of care to another.

MEDICARE

Its Inception

At the onset of Medicare, there were few regulations specifying the kinds of care which would be covered. As a result, any person sixty-five years of age and over having medicare insurance, could receive up to one hundred free visits from a public health nurse, upon the order of a physician. Much of the care given consisted of personal care, such as assistance with bathing, shampoo, and ambulation. Skilled nursing was not always a part of this care. At this point, many of the needs of the elderly were being met, and the program was widely used. In August of 1969, Intermediary Letter No. 395 was sent to all the participating home health agencies. This letter ushered in

a drastic change in the covered services available under Medicare. This letter stated:

> ....payments may not be made for home health services unless the services were required because the individual needed "skilled nursing care" on an intermittent basis, or physical or speech therapy.[7]

Because of this letter the term "skilled nursing" has played an important role in patient care. Everyone, including the physicians, public health nurses, hospital nurses and the public, involved with Medicare, has had a different interpretation of the term. Recently the range of nursing and other services covered by Medicare has been narrowed still more by "technical definitions." These definitions have been applied without cognizance of nursing care or the patients' needs, excluding all care given to maintain or promote health or prevent regression of mental or physical well being.

Thus a conflict arose between the care ordered and the types of care which are covered under Medicare. The coverage available under Medicare is divided into two parts, Part A and Part B.

Part A

Part A, known as hospital insurance, covers in-patient care in

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[7]United States Department of Health, Education, and Welfare, Social Security Administration, Bureau of Health Insurance, "Intermediary Letter No. 395," Government Printing Office, Washington, D.C., August, 1969.

hospitals, extended care facilities, and intermittent care in the home. The hospital insurance described in Part A pays for all covered services, for as many as one hundred home visits after the start of one benefit period and before the start of another. These benefits can be paid for up to one year after the most recent discharge from a hospital or participating skilled nursing facility, but only if the following conditions are met:

1. the patient was in a participating hospital for at least three consecutive days.
2. the continuing care needed includes part time skilled nursing care, physical, or speech therapy.
3. the patient is homebound.
4. the physician establishes a written plan of care within fourteen days after the patient's discharge from the hospital or participating skilled nursing facility.
5. the home care is further treatment of a condition for which the patient was hospitalized.

Cost. The patient must pay the first $60.00. After the $60.00 deductible has been met, the patient is not required to make any additional payments for home health visits, if the care needed is a covered service.[8]

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[8]United States Department of Health, Education and Welfare, Social Security Administration, Your Medicare Handbook, Publication # (SSA) 73010050, U. S. Government Printing Office, Washington, D.C., 1973, p. 11.

Part B

Part B, known as Supplementary Medical Insurance, assists with payments of physicians' fees, out-patient services, and some home health benefits. Part B entitles the patient up to one hundred home health visits for each calendar year, without requiring prior hospitalization, but only if the following conditions are met:

1. the patient needs part time skilled nursing care, physical or speech therapy.
2. the patient is homebound.
3. the physician determines that the patient needs home care.
4. the physician initiates and periodically reviews the plan of care.

Cost. Under Part B, the patient must pay the first $60.00 and 20 percent of the total cost of the covered services.[9]

Utilization

With the passage of time and the more restrictive regulations, appropriate patient referrals have begun to decrease, until a number of the home health agencies in North Dakota are struggling for survival.

The limited utilization of home health agencies is a concern of many states, including North Dakota. Home health services are the least costly of all the medical services, yet it is the one service

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[9]Ibid., p. 20.

that is seldom used. Ambrose[10] emphasizes that, after discharge, a patient usually goes to his home or that of a relative for weeks or months of recuperation. It has become apparent that hospitals are not preparing patients for continuity of care upon discharge. To receive continuity of care, the health care system as a whole must use all the existing public and private services, facilities, and agencies that will in a very real way make health care available and accessible. The decision for home care lies with a variety of interests, mainly the physicians and nurses, but also with the patient. The patient can be influential in the decision to receive home care but only if he is informed of the value of such services and is able to articulate his need to the nurses and doctors.

Lewis[11] stresses that cooperation is an essential aspect of any home health program. The medical staff must cooperate in referring and educating the patients regarding the benefits of the home health program.

Physicians' Role. In recent months home care has received consideration by the American Medical Association. An article in the American

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[10]Anne Ambrose, Sr., "Discharge Plans--The Weakest Link," Hospital Progress, March, 1973, p. 58.

[11]David Lewis and Marie Mackey, "Home Care Programs Cuts Dollars and Days," Canadian Hospitals, May 1973, p. 37.

Medical News[12] indicates that home care programs cannot be successful unless the quality of care is high and it is effectively utilized. Physicians, individually and collectively have important responsibilities in assuring that this standard is met. The author stated that:

> The medical societies' role should be given to stimulating physicians' interest in and acceptance of home care. The society must also take the lead in improving the coordination of existing home care services and stimulating the development of new ones where they are needed.[13]

It must be kept in mind that effective programs can offer high quality care and be an extension of the physicians at little cost and effort to the physician and at considerable savings to the patient. But home care programs cannot flourish without the support and guidance of the medical community. Ambrose[14] states that "medicare coverage is predicated upon the physicians professional judgment and his plan of treatment; some physicians are still skeptical or, at best, passive."

Nurses' Role. Professional nursing is responsible for meeting the needs of all people regardless of age. The rapidly increasing numbers of individuals in the older age group must be a concern of all professional nurses, if this segment of the population is to receive

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[12]Editorial, American Medical News, January 8, 1973, p. 5.

[13]Ibid.

[14]Ambrose, op. cit., p. 59.

adequate nursing care.[15]

Dawson[16] believes that continuity of care is dependent on the nursing profession's awareness of patients' needs and the professions planning for ways of meeting these needs. The hospital nurse is in a position to identify post-hospital nursing needs of patients that may be met by public health nursing intervention. The hospital nurse is also influential in aiding the physician in initiating appropriate referrals to the home health agencies.

Upon receipt of a physician's referral, the public health nurse is able to provide home health care to the patient in his home. An article in NLN News[17] facetiously stated that, "public health nurses do far more than wash and iron the patient and carry out those tasks which are deemed skilled." The article stressed that, in addition to medical orders and providing direct nursing care treatments, the public health nurse makes total assessment of patients' needs, evaluates family resources and home situations, makes observations of disease process and symptoms, develops nursing care plans, demonstrates

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[15]"Challenges to Nursing in Medicare," American Journal of Nursing, November, 1965, Volume 13, p. 68.

[16]Norma Dawson and Martha Stern, "Perceptions of Priorities for Home Nursing Care," Nursing Research, March - April, 1973, Volume 22, p. 145.

[17]Editorial, NLN News, Volume 21, No. 8, National League for Nursing, September, 1973, p. 3.

care and instructs the patient's family, supervises care provided by auxillary personnel, and coordinates services. Along with these services the public health nurse is responsible for the education of physicians, hospital nurses, and the public regarding the Medicare benefits available through the home health program. The American Hospital Association supports the idea that "the public should be informed of the potential for expert care in the home through various types of home care programs."[18]

HOME CARE TODAY

Nationwide

In a recent report Ryder[19] stated:

> ....home care offers a personal choice in medical care. Studies of older people show that up to 50 percent of those in institutions would really rather be in their own homes. Home care most importantly provides us with a way of allowing the individual to remain in comfort and dignity in his own home while at the same time it prevents dependency and loss of human resources.
>
> Despite these virtues, home care in the United States at this moment is at a standstill, if not in regression. There are about 2,300 home health agencies certified for Medicare reimbursement, and yet there are large geographic areas of the nation still with no such service. Fifty percent of our counties have no home health services and, although these counties represent a small proportion

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[18] American Hospital Association, The Hospital and the Home Care Program, 1972, p. 14.

[19] Claire F. Ryder, "In-Home Care Towards a National Policy and Strategy," Paper presented at 1972 Regional Meetings of Home Health Agencies and Community Health Services.

> of our population, they pose particular problems of distance and isolation in rural areas. Over half the agencies that are certified have only one or two nurses on staff. Since over 60 percent of the certified agencies are administered by health departments, these nurses often have many other responsibilities beyond the delivery of care to the patient in his home...

In North Dakota

Home care in North Dakota is experiencing difficulties. In 1969, there were nine agencies certified for Medicare reimbursement. As Medicare regulations became more restrictive and patient referrals began to decline, the home health agencies found it increasingly difficult to maintain their programs. As a result, in 1974, one home health agency terminated its services, leaving eight agencies in North Dakota. Of the remaining eight agencies, only seven are continuing to offer home care. The eighth agency is in serious financial trouble, with the possibility of closure within the year.

Although North Dakota has eight home health agencies, there are large areas of this rural state which do not have access to home care. North Dakota has fifty-one counties, twenty of which have access to home health programs. With the possible closure of another agency, North Dakota would be left with only twelve counties offering home health care.

An article in the NLN News[20] quoted Senator Muskie as saying

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[20] NLN News, op. cit., Volume 21, No. 8, p. 3.

"restrictive reimbursement policies have limited payments for home health services to less than one percent of Medicare expenditures. What should be an important segment of our national health system has been badly crippled by a combination of negative attitudes."

A statement from Trager's[21] report sums up the situation well.

> A review of home health services available in the United States must lead to the conclusion that they do not constitute a valid resource for the population which could make appropriate use of them.
>
> They are in short supply, they do not offer the comprehensive range of services required, they are limited in their capacity to provide for any significant volume of the population in need, and they have no geographic coverage. Where they do exist, the services are fragmented and are decreasing rather than expanding.

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[21] Brajan Trager, Home Health Services in the United States, A Report to the Special Committee on Aging, Government Printing Office, Washington, D.C., 1972, p. 61.

Chapter III

METHODOLOGY

The data presented in this study were collected through the use of a survey instrument. The written questionnaire was considered to be the best method for collection of data in this nonexperimental descriptive research effort. The design is also conducive to data collection over a large geographic area with relative speed and ease.[22]

An open-ended questionnaire was devised by the researcher to be sent to the target population located in the geographic areas of the nine home health agencies in North Dakota.

PILOT STUDY

In order to validate and refine the proposed tool, the initial questionnaire was mailed to four public health nurses, four physicians and four hospital nurses associated with home health agencies in Montana. Several problem areas relating to clarity and ease of response were identified in the initial questionnaire. Revisions were then made to produce the final version of the questionnaire.

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[22] Hillway Tyrus, Introduction to Research (Boston: Houghton Mifflin Company, 1956), p. 201.

SELECTION OF THE POPULATION

A purposive sample was selected from physicians, public health nurses, and hospital nurses employed in the geographic areas of the nine home health agencies in North Dakota.

Physicians

There are approximately 500 physicians in North Dakota. From this group 228 were selected. A current listing of physicians was acquired from the North Dakota State Department of Health. This listing was reviewed by the researcher and those physicians were eliminated who were deemed least likely to utilize the services of a home health agency. The physicians eliminated are as follows:

1. pediatricians
2. obstetricians
3. gynecologists
4. ear, nose and throat specialists
5. osteopaths
6. dermatologists
7. allergy specialists
8. dentists
9. psychologists
10. adolescent medicine
11. neurosurgeons
12. radiologists
13. psychiatrists
14. physicians employed by Veterans Hospitals and Air Base Hospitals.

Hospital Nurses

A total of sixty hospital nurses were selected for the researcher by the executive secretary of the North Dakota State Nurses Association. The executive secretary was provided with the criteria for the selection of these nurses. The criteria were as follows:

1. four nurses were to be selected from each of the specified hospitals. The twenty-two hospitals selected for the study were located in the geographic areas of the nine home health agencies.
2. each nurse must be employed.

The sample population selected to participate in this study was smaller than anticipated. In some cases, fewer than four nurses were selected, because some of the small, rural hospitals did not employ four registered nurses.

Public Health Nurses

There were seventy-five public health nurses employed in North Dakota. Of these seventy-five public health nurses, fifty-two work in local agencies offering home health services under medicare. These fifty-two public health nurses were selected to participate in this study.

METHOD OF COLLECTING THE DATA

The questionnaire, a cover letter explaining the purpose of the study and requesting the participation of the respondent, along

with a self addressed envelope, were sent to the sample population selected for this study. Every effort was made to maintain total anonymity throughout the study.

One month following the initial mailing, a follow-up letter was sent to all study participants. (An example of the questionnaire and cover letters are located in Appendix A.)

The sample population for this study totaled 340 physicians, public health nurses, and hospital nurses. Table 1 indicates the percentage of questionnaires returned by the respondents.

Table 1

RESPONSE TO QUESTIONNAIRE BY GROUPS OF RESPONDENTS

Respondents	Number Sent	Number Returned	Percentage
Physicians	228	91	39
Public Health Nurses	52	32	62
Hospital Nurses	60	28	45

Chapter IV

PRESENTATION OF DATA

The data presented in this study were collected by the survey questionnaire method. Each response was reviewed and categorized by the researcher. (A categorization of responses is presented in Appendix C.) The data gathered were then analyzed for possible significant findings. These findings are presented in tabular form in this chapter. It should be noted that the percentages in each table have been rounded to the nearest whole number.

The reader will note that each table contains a large percentage of "no response," occuring most frequently in the responses made by the physicians and hospital nurses. It is the opinion of the researcher, that these two groups were unable to answer those questions, due to limited knowledge of, or association with, a home health agency.

Table 2

EFFECTIVENESS OF HOME HEALTH PROGRAMS IN NORTH DAKOTA AS PERCEIVED BY PHYSICIANS, PUBLIC HEALTH NURSES AND HOSPITAL NURSES

Degree of Effectiveness	Physicians N-91		PHN N-32		Hospital Nurses N-28		Total N-151	
	No.	%	No.	%	No.	%	No.	%
Very Effective	8	9	6	25	2	7	16	16
Effective	25	27	12	22	5	18	42	28
Ineffective	32	35	10	41	14	50	56	32
No Response	26	29	4	12	7	25	37	24
Total	91	100	32	100	28	100	151	100

A fairly even distribution of responses was observed in the data presented in Table 2. Of those responding, the largest percent felt the home health programs were less than adequate in North Dakota. A further analysis of the responses show that 35 percent of the physicians, 41 percent of the public health nurses, and 50 percent of the hospital nurses felt the home health programs were ineffective.

It should be noted that 6 or 25 percent of the public health nurses felt the program was very effective, while only 8 or 9 percent of the physicians responding felt the program was very effective.

Table 3

INDICATORS OF THE EFFECTIVENESS OF THE HOME HEALTH PROGRAMS IN NORTH DAKOTA AS PERCEIVED BY THE PHYSICIANS, PUBLIC HEALTH NURSES, AND HOSPITAL NURSES

Indicators	Physicians N-91		PHN N-32		Hospital Nurses N-28		Total N-151	
	No.	%	No.	%	No.	%	No.	%
Physician Referrals	1	1	10	31	1	4	12	8
Number of people served	7	8	11	34	8	29	26	17
Feedback from patients and families	31	34	--	--	--	--	31	21
Those who were able to remain out of the institutions	2	2	2	6	2	7	6	4
Met physicians' needs	5	5	--	--	--	--	5	3
Accessability of program in regards to geography and staff	5	5	2	6	1	4	8	5
Follow up reports from PHN	4	4	--	--	--	--	4	3
No response	36	40	7	21	16	56	59	39
Total	91	100	32	100	28	100	151	100

The data in Table 3 indicate that the largest percent of the respondents measure their home health program's effectiveness by the number of patients which it serves. Further analysis of the data show that 34 percent of the public health nurses and 29 percent of the hospital nurses felt that the number of patients served was a good indicator of their program's effectiveness. Thirty-four percent of the physicians identified feedback from the patients and their families as the means by which they measure the program's effectiveness.

It is interesting to note that only 8 percent of all respondents found physician referrals an important means of measuring the effectiveness of the home health program. The public health nurses were the only group who identified this as an area of importance.

Table 4

FACTORS LIMITING THE EFFECTIVENESS OF THE HOME HEALTH PROGRAMS IN NORTH DAKOTA AS PERCEIVED BY THE PHYSICIANS, PUBLIC HEALTH NURSES AND HOSPITAL NURSES

Limiting Factors	Physicians N-91		PHN N-32		Hospital Nurses N-28		Total N-151	
	No.	%	No.	%	No.	%	No.	%
Cost	16	18	5	16	--	--	21	14
Limited physician referrals	2	2	6	19	3	11	11	7
Restrictive government regulations	11	12	9	28	2	7	22	15
PHN staff limitations	15	16	3	9	8	29	26	17
Lack of knowledge,RN	2	2	1	3	2	7	5	3
Lack of knowledge,MD	6	7	5	16	2	7	13	9
Lack of knowledge,Pt.	7	8	1	3	1	4	9	6
Limited community publicity	2	2	1	3	1	4	4	3
No response	30	33	1	3	9	32	40	26
Total	91	100	32	100	28	100	151	100

The data presented in Table 4 identify two areas, considered by the respondents, to be the greatest limiting factors of the home health programs. Seventeen percent of the respondents felt that the limitations of the public health nursing staff was the greatest limiting factor. Restrictive government regulations were identified by 15 percent of the respondents to be the second greatest limiting factor.

It should be noted that 9 or 19 percent of the public health nurses felt that limited physician referrals was a limiting factor for the home health programs in North Dakota, while only 2 or 2 percent of the physicians indicated this to be a problem.

Table 5

FACTORS CONTRIBUTING TO THE SUCCESS OF THE HOME HEALTH PROGRAMS IN NORTH DAKOTA, AS PERCEIVED BY THE PHYSICIANS, PUBLIC HEALTH NURSES AND HOSPITAL NURSES

Factors	Physicians N-91		PHN N-32		Hospital Nurses N-28		Total N-151	
	No.	%	No.	%	No.	%	No.	%
Communication with other professionals	6	7	3	9	3	11	12	8
Qualified PHNs	33	36	6	19	2	7	41	27
Public awareness	1	1	4	13	2	7	7	5
Increased referrals	4	4	2	6	3	11	9	6
Patient feedback	2	2	5	16	1	4	8	5
No response	45	50	12	38	17	61	74	49
Total	91	100	32	100	28	100	151	100

The array of data in Table 5 indicate that the largest percent of the respondents felt that the success of the home health programs was the result of qualified public health nursing staff. A dichotomy has occurred, with Table 4 presenting conflicting data. It identified the greatest limiting factor of the home health program to be the

limitations of the public health nursing staff.

Public awareness of the home health programs was identified by 7 or 5 percent of the respondents to be a factor in the success of the home health programs. Data in Table 4 also indicated that lack of knowledge by patients (public) was a limiting factor. Again, there appears to be disparity among the responses.

It should be noted that 7 percent of the physicians, 9 percent of the public health nurses, and 11 percent of the hospital nurses felt that communication with other professionals was contributing to the success of the home health programs.

Table 6

PHYSICIANS' REACTIONS TO THE HOME HEALTH PROGRAMS IN NORTH DAKOTA, AS PERCEIVED BY PHYSICIANS, PUBLIC HEALTH NURSES, AND HOSPITAL NURSES

Physician Reactions	Physicians N-91		PHN N-32		Hospital Nurses N-28		Total N-151	
	No.	5	No.	%	No.	%	No.	%
Favorable	28	31	5	16	6	21	39	25
Mixed	13	14	7	22	6	21	26	17
Indifferent	17	19	8	25	11	39	36	24
Neutral	1	1	--	--	--	--	1	1
No response	32	35	12	12	5	19	49	32
Total	91	100	32	100	28	100	151	100

Examination of the data presented in Table 6 show an interesting picture of the physicians' reactions to the home health programs, as perceived by all respondents. Of those responding, 25 percent felt the physicians' reactions were favorable, 17 percent felt the reactions were mixed, and 24 percent felt the physicians' reactions were indifferent.

It should be noted that 31 percent of the physicians saw their reactions as favorable, 14 percent as mixed and 19 percent as indifferent. Of the nurses responding, 36 percent of the public health